Gold Standard for the Global Goals

TEMPLATE

MONITORING REPORT

PUBLICATION DATE **14.10.2020**
VERSION **v. 1.1**
RELATED SUPPORT **- TEMPLATE GUIDE Monitoring Report v. 1.1**

This document contains the following Sections

Key Project Information

SECTION A. DESCRIPTION OF PROJECT

SECTION B. IMPLEMENTATION OF PROJECT

SECTION C. DESCRIPTION OF MONITORING SYSTEM APPLIED BY THE PROJECT

SECTION D. DATA AND PARAMETERS

SECTION E. CALCULATION OF SDG IMPACTS

SECTION F. SAFEGUARDS REPORTING

SECTION G. STAKEHOLDER INPUTS AND LEGAL DISPUTES

KEY PROJECT INFORMATION

Key Project Information

GS ID (s) of Project (s)	5099
Title of the project (s) covered by monitoring report	Greentech' Emission Reductions from PET Recycling, Romania
Version number of the PDD/VPA-DD (s) applicable to this monitoring report	V4
Version number of the monitoring report	V3.1
Completion date of the monitoring report	30.08.2024
Date of project design certification	06.12.2018
Date of Last Annual Report	12/12/2022
Monitoring period number	3
Duration of this monitoring period	01/01/2021 – 30/09/2023
Project Representative	Carbon Expert International Srl.
Host Country	Romania
Activity Requirements applied	☐ Community Services Activities ☐ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☒ N/A
Methodology (ies) applied and version number	AMS-III.AJ. Recovery and recycling of materials from solid wastes, V6.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A

Table 1 - Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/ Products
SDG 13 Climate action	Emissions reductions	106, 625	tCO2e/ VERs
SDG 3 Good Health & Well Being	Number of new health workforce recruited each year	83	
SDG 3 Good Health & Well Being	Number of training sessions on safety and health at working environment	1596	
SDG 3 Good Health & Well Being	Number of trainings on fire and safe protection	72	
SDG4 Quality Education	Number of visits of school children to the plant to enhance environment education and climate change awareness	39	
SDG4 Quality Education	Number of children and students trained on recycling, sustainable development and circular economy	2,583	
SDG4 Quality Education	Number of training sessions to promote recycling and sustainable development	48	
SDG 5 Gender Equality	Number of women employed by project activity	266 in 2021 232 in 2022 194 in 2023	
SDG 5 Gender Equality	Proportion of women in total employment	37% in 2021 36% in 2022 34% in 2023	
SDG 5 Gender Equality	Number of women in managerial positions	7 in 2021 8 in 2022 10 in 2023	
SDG 5 Gender Equality	Proportion of women in managerial positions in total management positions	42% in 2021 47% in 2022 59% in 2023	
SDG 7 Affordable and Clean Energy	Energy Savings	89,007	MWh
SDG 7 Affordable and Clean Energy	Fuel Savings	455,653	MWh

SDG 8 Decent work & Economic Growth	Number of staff employed in the project activity	707 in 2021 652 in 2022 566 in 2023	
SDG 8 Decent work & Economic Growth	Number of trainings regarding the technical services required to operate the recycling plant	24	
SDG 8 Decent work & Economic Growth	Number of suggestions, recommendations made by the employees	412	
SDG 8 Decent work & Economic Growth	Wage bonuses offered by the employer to the employees	2,456,237	Euro
SDG 9 Industry, Innovation & Infrastructure	Number of local people employed by the project activity	689 in 2021 631 in 2022 557 in 2023	
SDG 9 Industry, Innovation & Infrastructure	Proportion of local people employed in total number of employees	97% in 2021 97% in 2022 98% in 2023	
SDG 10 Reduce Inequalities	Foreign exchange saved	19,663,271	Euro
SDG 11 Sustainable Cities & Communities	Quantity of the municipal plastic waste collected by the project activity	166,327	tons
SDG 11 Sustainable Cities & Communities	Project plastic waste collected quantity	0	tons
SDG 12 Responsible Consumption & Production	Quantity of plastic material recycled per year	117,453	tons
SDG 12 Responsible Consumption & Production	Number of programs to encourage more environmentally-friendly and responsible products and services	16	

Table 2 – Product Vintages

		Amount Achieved
Start Dates	**End Dates**	**Product A**
01/01/2021	31/12/2021	51,569 tCO2e
01/01/2022	31/12/2022	32,165 tCO2e
01/01/2023	30/09/2023	22,891 tCO2e

SECTION A. DESCRIPTION OF PROJECT

A.1. General description of project

"Greentech's Emissions Reductions from PET Recycling, Romania" project (hereinafter called "the Project") start date is 19th October 2012.

The Project's first tender for the acquisition of the PET1 R-PET (Recycled-PET) line was 19th October 2012, which is the start date of the project. Then, it had the final commissioning of the R-PET line from PET post consumed bottles on 1st October 2014, and began commercial operation on 27th October 2014, in line with its Environment Authorisation no. 233/27.10.2014.

The Project has been recycling PET waste, reducing energy consumption that would otherwise be required for the production of plastic products made of virgin inputs, and consequently reducing greenhouse gases emissions (GHGs).

The Project activity has been implementing in Buzau county, in the city of Buzau, which is located in the South Eastern part of Romania in Muntenia province. The coordinates for the recycling plants in Buzau obtained using GPS are: 45°08'01.17724"N, 26°49'12.39768"E. The output capacity of the R-PET plant in Buzau is 12,000 tons/year.

In 2015, Greentech started the investment for strap production, and it started the construction of a new automatic line, which was finalized on December 2016. The new line is located in Frasinu Industrial Park, Tintesti village (3 kilometers far from Buzau city), having the following GPS coordinates: 45°06'26.04644"N, 26°49'41.13368"E. The output capacity of the strap plant in Frasinu is 9000 tons/year. From August 2016, Greentech switched from light fuel oil (LFO) to natural gas at Frasinu plant.

Greentech buys from collectors, which are authorized companies for plastic waste collection activities, and from companies which generate such a waste: PET post-consumer bottles with or without caps, with or without labels, sorted or not by colours, baled PET in view of transportation to project locations.

The production lines and the technology of the recycling plants have been supplied by foreign providers, the assembly and installation were done by Greentech's own stuff assisted by foreign technicians, and the maintenance is provided, as well, by Greentech's own employees.

In 2016, another investment was started for the production of the fiber in Urziceni, a location closed to Buzau (53 kilometers from Buzau city). The fiber line from Urziceni, operated by GreenFiber International - the sister company of Greentech, has the following GPS coordinates: 44°43´05.2˝N; 26°38'43.1˝E. The output capacity of the polyester fiber plant is 32,400 tons/year.

In the current monitoring period (01/01/2021- 30/09/2023), Greentech had the following CAPEX investments needed to improve the quality of its technology:

1. Improve the quality of the production lines with: equipment new parts (like chillers, routers, electric cabins, innovation in sorting line for introducing ARM);

2. Improve the quality of the production line in regards of energy efficiency: technical studies for applying photovoltaic panels and smart metering devices; replace central heating;
3. Invest in environmental infrastructure: improvement of water treatment station, sewage;
4. Invest in health and safety infrastructure: fire system and gas detection system; exhausting systems; new routes for hanging parts of equipement; fence for separating materials; investment in social groups; handrails.

The project design or its technologies did not change with any of the improvements implemented, as they did not change any of the specific characteristics, application, capacities, and operation flows. Therefore, these improvements/amendments are not significant.

Total emission reductions achieved in this monitoring period 01/01/2021 – 30/09/2023

The calculation of GHG emission reductions by the project activity is limited to carbon dioxide (CO_2) only and its primary source is reducing energy consumption that would otherwise be required for the production of plastic products made of virgin inputs, and consequently reducing greenhouse gases emissions (GHGs). The GHG emissions reduction[1] under current monitoring period is **106,625 tCO_{2e}**

This project is in line with specific UN sustainable development goals since it contributes to local environmental sustainability, since recycling instead of using material from virgin inputs decreases the overall energy use, CO2 emissions and environmental burden caused by natural resources extraction. At the same time, PET waste recycling reduces the amount of waste to be disposed in the landfill.

Thereore, the project activity meets the following UN sustainable goals and monitors 37 parameters related to these SDGs:

1. SDG 3 Good Health and Well Being
2. SDG 4 Quality Education
3. SDG 5 Gender Equality
4. SDG 7 Affordable and Clean Energy
5. SDG 8 Decent work and economic growth
6. SDG 9 Industry Innovation and Infrastructure
7. SDG 10 Reduce inequalities within and among countries
8. SDG 11 Sustainable Cities and Communities
9. SDG 12 Responsible consumption and production
10. SDG 13 Climate Action

What makes the project special?

[1] The GHG emissions reduction calculation, according to the applicable methodology, is provided into a separate Excel document, "Greentech SDG13_CO2 Savings_Jan2021-Sept2023_07.05.2024.xls"

Apart from the economic benefits of reducing pollution in terms of CO2 emissions and plastic waste, the Project has other important economic and social benefits:

- It is an unique integrated business model, from the waste input to the finished products, which offers solutions for all types of PET waste;
- It offers a competitive advantage in the Central and Eastern Europe, being the foundation of the recycling business in this region
- The Project has a well-proven, fair and reliable production process and a state-of-art technology. The high performant innovative quality output products out from waste are recycled PET, recycled Strap, recycled Fiber
- Job creation and improved working conditions where the project is located (Buzau, Iasi, Frasinu/Romania): GreenTech and GreenFiber have 1300 employees, being the biggest employer in Buzau city, offering employment to many people coming from disadvantaged backgrounds
- Gender equality approach, women being promoted in management position, including the high level management
- Development of local technological capacity. The manpower and the technical maintenance are provided domestically in the country
- Contributes to the local and social community development: Green Group promotes training classes on environment and recycling in the schools in the region and shares its expertise with the local municipality of Buzau and other local municipalities to create circular cities (Circular Economy partnerships)
- It contributes to a large extent to the local municipalities' funds for social insurance, such as health and pension funds, and to local and social community development.
- The project has a strong ESG function and regularly monitored and permanently grow its impact on the achievement of the SDG targets

A.2. Location of project

The Project is located in the Eastern part of Romania, in Buzau region, within Buzau city and Tintesti village.

The host party is Romania. Romania ratified Kyoto Protocol on 2002 together with all EU countries. Romania signed Paris Agreement on 22nd April 2016 together with all EU countries and sent the instrument for ratification the Paris agreement on 1st June 2017.

The plants within the Project are located at 110 km NE from Bucharest, the capital of Romania in Buzau city (R-PET plant), Tintesti village (strap recycling plant), and at 60 km NE from Bucharest in Urziceni city (fiber recycling plant).

The coordinates for the R-PET recycling plants in Buzau obtained using GPS are: 45°08'01.17724"N, 26°49'12.39768"E.

The coordinates for the strap recycling plant in Frasinu Industrial Park, Tintesti village, Buzau county, obtained using GPS are: 45°06'26.04644"N, 26°49'41.13368"E.

The coordinates for the fiber recycling plant located in Urziceni, Ialomita county, using GPS are: 44°43´05.2˝N, 26°38´43.1˝E.

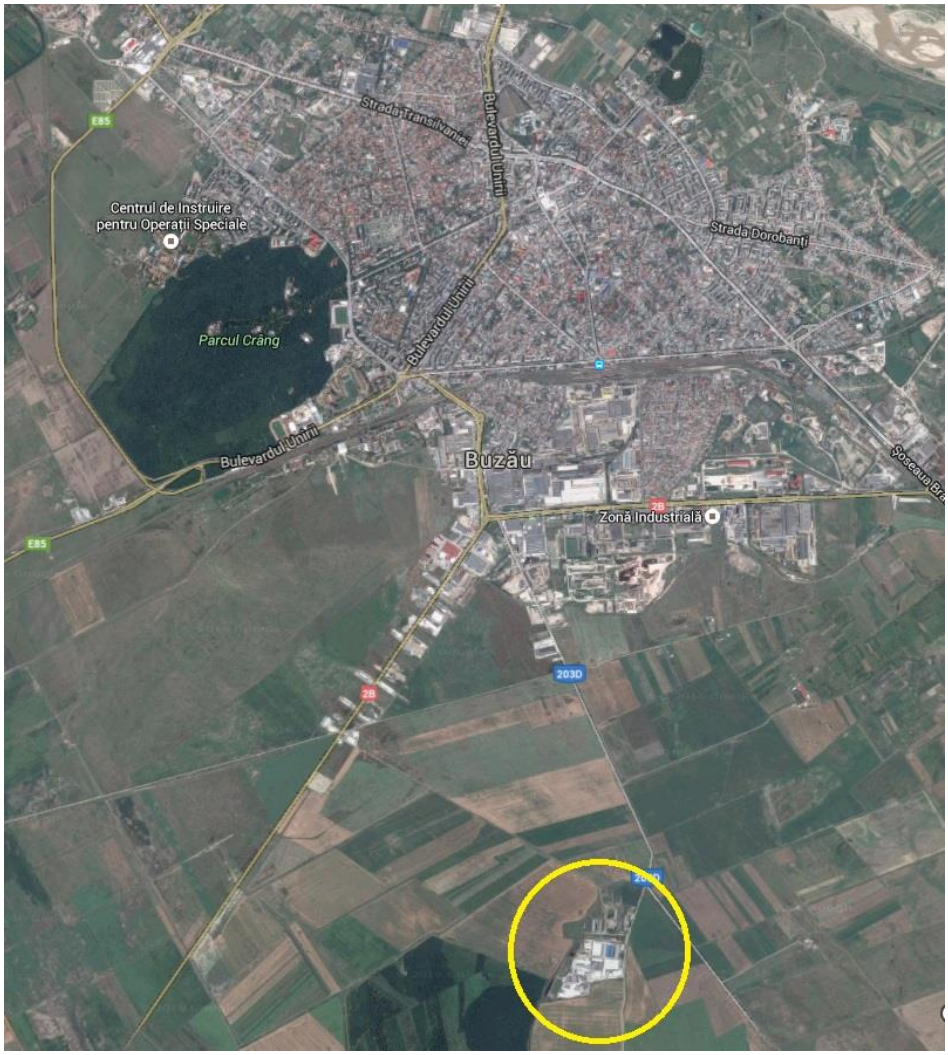

Figure 1: Greentech PET Recycling Plant in Buzau

A.3. Reference of applied methodology

This project uses the existing small scale CDM methodology AMS-III.AJ. Recovery and recycling of materials from solid wastes. Version 06.0.

This methodology covers the emissions reductions associated with the production of high density polyethylene (HDPE), low density polyethylene (LDPE), Polyethylene Terephthalate (PET), Polypropylene (PP), and container glass from virgin materials, thus reducing related energy consumption.

Sectoral Scope: 13. Waste handling and disposal

It is assumed that baseline emissions include emissions associated with energy consumption for the production of PET pellets from virgin plastic materials.

A.4. Crediting period of project

10 years fixed period, from 01/01/2017 to 31/12/2026

Duration of Monitoring period under the current verification cycle is from 01/01/2021 to 30/09/2023.

SECTION B. IMPLEMENTATION OF PROJECT

B.1. Description of implemented project

The Project activity has been implementing in Buzau county, operating two plants in the city of Buzau and Tintesti village, which are located in the South Eastern part of Romania.

Greentech S.A. company was set up in 2003, consisting of two washing lines for PET bottles. Until 2014, important development stages were performed at Greentech S.A., including five washing lines and a new automatic sorting plant.

In 2015, Greentech started the investment for strap production, and it started the construction of a new automatic line, which was finalized on December 2016. The new line is located in Frasinu Industrial Park, Tintesti village, at 3 kilometres far from Buzau city. The output capacity of the strap plant in Frasinu is 9000 tons/year. From August 2016, Greentech switched from light fuel oil (LFO) to natural gas at Frasinu plant.

Greentech buys from collectors, which are authorized companies for plastic waste collection activities, and from companies which generate such a waste: PET post-consumer bottles with or without caps, with or without labels, sorted or not by colours, baled PET in view of transportation to project locations.

The production lines and the technology of the recycling plants have been supplied by foreign providers, the assembly and installation were done by Greentech's own stuff assisted by foreign technicians, and the maintenance is provided, as well, by Greentech's own employees

In 2016, another investment was started for the production of the fiber in Urziceni, a location closed to Buzau (53 kilometers from Buzau city). The fiber line from Urziceni, operated by GreenFiber International - the sister company of Greentech, has the following GPS coordinates: 44°43´05.2˝N; 26°38'43.1˝E. The output capacity of the polyester fiber plant is 32,400 tons/year.

In the previous monitoring period (01/01/2019 – 31/12/2020) we have addressed a deviation request no. 360/11.07/2023 which was rejected by Gold Standard. We have submitted also a Reconsideration request of the Deviation request no. 360 decision on 8th September 2023, which was rejected by Gold Standard. A clarification request was also sent to Gold Standard on 7th May 2024, having the main subject as we can not

accept the rejection as final decision. We shall proceed using all appeal mechanisms to finalize the clarification on this issue.

In the current monitoring period (01/01/2021-30/09/2023), Greentech had the following investments needed to improve the quality of its technology:

1. Improve the quality of the production lines with: equipment new parts (like chillers, routers, electric cabins, innovation in sorting line for introducing ARM;
2. Improve the quality of the production line in regards of energy efficiency: technical studies for applying photovoltaic panels and smart metering devices; replace central heating;
3. Invest in environmental infrastructure: improvement of water treatment station, sewage;
4. Invest in health and safety infrastructure: fire system and gas detection system; exhausting systems; new routes for hanging parts of equipement; fence for separating materials; investment in social groups; handrails.

B.1.1 Forward Action Requests

No Forward Actions Requests

B.2. Post-Design Certification changes

No Post-Design Certification changes

B.2.1. Temporary deviations from the approved Monitoring & Reporting Plan, methodology or standardized baseline

There is no request for deviation from monitoring & reporting plan, methodology or standardized baseline applied during this monitoring period.

B.2.2. Corrections
No correction made in this monitoring period.

B.2.3. Changes to start date of crediting period
There have not been any changes to start date of crediting period. The start date of the crediting period is 01/01/2017.

B.2.4. Permanent changes from the Design Certified monitoring plan, applied methodology or applied standardized baseline

There are no changes from the Design Certified monitoring plan, applied methodology or applied standardized baseline

B.2.5. Changes to project design of approved project
There are no changes to project design of approved project

SECTION C. DESCRIPTION OF MONITORING SYSTEM APPLIED BY THE PROJECT

The monitoring system of all SDGs of this monitoring period has been supervised by the ESGs, Compliance & HR Manager who has centralized the collected data and supervised all departments involved in the process of monitoring (Operational department, Human Resources, Health&Safety, Public Relation, Financial, Technical).

All data used (electricity and fuel consumption, amount of PET bottles waste received and recycled PET flakes generated etc.) have been obtained directly from the measures developed by the technical staff in the recycling plant.

The emission factors for electricity and fuel are consulted and updated trough official Romanian documentation.

The monitoring plan has been implemented by internal technical staff in charge of the each recycling plant. The plan is made to verify that the emission reductions are real and measurable. The data needed for the emissions reduction calculations have been monitored transparently during the crediting period. The data collection have been done by internal technical staff in the recycling plants, depending on the parameter, according to the followings:

1.0 Data collected

The data to be collected is the following:

(a) Mass of PET bottle waste entering in the recycling facility (input), measured by direct weighing;
(b) Mass of recycled PET flakes by the recycling facility available for R-PET, PET Strap and PET Fiber, measured by direct weighing;
(c) Mass of R-PET, PET Strap, PET Fiber (output);
(d) Amount of electricity consumed at the recycling facility for power equipment;
(e) Emission factor for the electrical grid system;
(f) Amount of fossil fuel consumed.

2.0 In addition, these documents collected by the internal technical staff have been made available to VVB at verification:

- Invoices documents regarding the fuel consumed at the recycling facility;
- Electricity invoices regarding the electricity consumptions of the recycling facility from the national grid;
- Receipts and invoices regarding purchases of the PET waste and sales of recycled products (to be collected by the technical staff of Greentech in charge of the recycling plants operation).

3.0 The data to be monitored

The set of data to be monitored during the current monitoring period is provided in D2.

4.0 The equipment for monitoring

The weighting system is calibrated each year. The recycling plant checks completeness of invoices concerning electricity and fossil fuel consumptions. The recycling plant checks at least monthly, if consumption fit to the produced quantities. The project proponent also checks continuously the amount of incoming and produced PET.

Greentech S.A is ISO 9001; 14001; 45001 certified and all weighting systems are calibrated each year according to operational procedures PS - 14.

5.0 Verification and calibration of the equipment

The verification and calibration of the weighting system/scales is done by Romanian Bureau of Legal Metrology according to its own procedure. Documents files to prove the calibration of the devices can be found in the folders: "BUZAU 2021_2023_metering device" and "FRASINU 2020_2023._mettering device"

6.0 Data Management and treatment

All data collected by Production, Technical and Purchasing department from the recycling plants and manufacturers will be centralised by themselves according to the Procedure for the control of documents PS- 14 foreseen by ISO 9001.

7.0 Monitoring Report

All the data from production are monitored in monthly reports issued by the production department. These documents contain the data for input raw materials, output, consumption of all utilities (electricity, gas, water, fuel etc.)

The data about energy and fuel for all production and departments as well as for administration department are centralized by the technical manager.

The internal technical staff is responsible for preparing the monitoring report under the supervision of the VVB. All the related records of verification, reading, cross-checking will be readily accessible for the verification of the VVB.

All reports are centrally kept by the internal staff dedicated to this project and made available to the VVB.

The SDG indicators have been centralized in the Excel document "Greentech SDG indicators_MR03_01Jan2021-30Sept2023_07.05.2024.xls", which has been verified by the VVB.

SECTION D. DATA AND PARAMETERS

D.1. Data and parameters fixed ex ante or at renewal of crediting period

There are six parameters fixed ex-ante, which are needed to measure the impact of SDG 13.

SDG 13. Climate Action

Ex-ante parameter no.1

Data/Parameter	**$EF_{el, CO2}$; EF_{FFCO2}**
Unit	EF $_{el\ CO2}$ - tCO_2/MWh for electricity generation; EF $_{FFCO2}$ - tCO_2/GJ for fossil fuel, natural gas.
Description	CO_2 emission factor for energy consumption in the production of plastic PET pellets from virgin plastic material; CO_2 emission factor for natural gas consumption in the production of plastic PET pellets from virgin plastic material;
Source of data	Calculated from the source: Clean Development Mechanism AMS-III.AJ, Small-scale Methodology Recovery and recycling of materials from solid wastes, Version 6.0, Sectoral scope: 13; Baseline methodology for emissions associated with energy consumption for the production of plastic pellets from virgin plastic materials.
Value(s) applied	EF $_{el\ CO2}$ = 0.701 tCO_2/MWh for electricity EF_{FFCO2} = 0.202 tCO_2/MWh for natural gas EF $_{FFCO2}$ = 73.56 $kgCO_2/GJ$ for Diesel EF $_{FFCO2}$ = 71.62 $kgCO_2/GJ$ for Gasoline EF $_{FFCO2}$ = 74.08 $kgCO_2/GJ$ for LFO
Choice of data or Measurement methods and procedures	Emission factors for electricity consumed national and European - technical annex to the SEAP template instructions; The list of the national values of the emission factors and net calorific values, specific to each type of fuel and type of activity - EU-ETS 2012 (www.anpm.ro; www.mmediu.ro).
Purpose of data	To calculate the baseline emissions.
Additional comments	N/A

Ex-ante parameter no.2

Data/Parameter	**L_i**
Unit	-
Description	Net to gross adjustment factor to cover degradation in material quality and material loss in the production process of the final product using the recycled material
Source of data	Clean Development Mechanism AMS-III.AJ, Small-scale Methodology Recovery and recycling of materials from solid wastes, Version 6.0, Sectoral scope:13; Baseline methodology for emissions associated with energy consumption for the production of plastic pellets from virgin plastic materials. (http://pswm.uvic.ca/wp-content/uploads/2012/05/Read-the-Publication.pdf)
Value(s) applied	0.75

Choice of data or Measurement methods and procedures	From baseline methodology for emissions associated with energy consumption for the production of plastic pellets from virgin plastic materials; chapter 5.2 - see attached excel file
Purpose of data	To calculate the baseline emissions
Additional comment	i-Plastic includes R-PET, Strap and Fibre

Ex-ante parameter no.3

Data/Parameter	**SEC_{BL}**
Unit	MWh/t
Description	Specific electricity consumption at virgin PET production facility
Source of data	Clean Development Mechanism AMS-III.AJ, Small-scale Methodology Recovery and recycling of materials from solid wastes, Version 6.0, Sectoral scope:13; Baseline methodology for emissions associated with energy consumption for the production of plastic pellets from virgin plastic materials.
Value(s) applied	1.110
Choice of data or Measurement methods and procedures	It is assumed that process energy for polymerization is supplied with electricity; Clean Development Mechanism AMS-III.AJ, Small-scale Methodology Recovery and recycling of materials from solid wastes, Version 6.0, Sectoral scope:13; Baseline methodology for emissions associated with energy consumption for the production of plastic pellets from virgin plastic materials.
Purpose of data	To calculate the baseline emissions
Additional comment	N/A

Ex-ante parameter no.4

Data/Parameter	**SFC_{BL}**
Unit	GJ/t
Description	Specific natural gas consumption at virgin PET production facility
Source of data	Clean Development Mechanism AMS-III.AJ, Small-scale Methodology Recovery and recycling of materials from solid wastes, Version 6.0, Sectoral scope:13; Baseline methodology for emissions associated with energy consumption for the production of plastic pellets from virgin plastic materials
Value(s) applied	15
Choice of data or Measurement methods and procedures	Clean Development Mechanism AMS-III.AJ, Small-scale Methodology Recovery and recycling of materials from solid wastes, Version 6.0, Sectoral scope: 13; Baseline methodology for emissions associated with energy consumption for the production of plastic pellets from virgin plastic materials. Baseline emissions
Purpose of data	To calculate the baseline emissions
Additional comment	N/A

Ex-ante parameter no.5

Data/Parameter	B_i
Unit	-
Description	Correction factor based on share of production in non-Annex I countries
Source of data	Clean Development Mechanism AMS-III.AJ, Small-scale Methodology Recovery and recycling of materials from solid wastes, Version 6.0, Sectoral scope: 13; Baseline methodology for emissions associated with energy consumption for the production of plastic pellets from virgin plastic materials. Baseline emissions
Value(s) applied	1.0
Choice of data or Measurement methods and procedures	Clean Development Mechanism AMS-III.AJ, Small-scale Methodology
Purpose of data	To calculate the baseline emissions
Additional comment	-

Ex-ante parameter no.6

Data/Parameter	$SEC_{P,i}$
Unit	-
Description	Energy consumption factor for processing of recycled material i in the processing/manufacturing facility
Source of data	Clean Development Mechanism AMS-III.AJ, Small-scale Methodology Recovery and recycling of materials from solid wastes, Version 6.0, Sectoral scope: 13; Baseline methodology for emissions associated with energy consumption for the production of plastic pellets from virgin plastic materials. Baseline emissions
Value(s) applied	0
Choice of data or Measurement methods and procedures	Clean Development Mechanism AMS-III.AJ, Small-scale Methodology
Purpose of data	To calculate the baseline emissions
Additional comment	-

D.2 Data and parameters monitored

The recycling plant monitors 37 parameters, as presented in the tables below.

All SDG indicators can be found in the Excel document, "Greentech SDG indicators_MR03_01Jan2021-30Sept2023_07.05.2024.xls".

Monitoring parameter no. 1

Relevant SDG Indicator	**SDG3 Good Health and Well Being**
Data/Parameter	Number of new health workforce recruited each year
Unit	-
Description	The number of new health workforce annually recruited by the recycling plant. The indicator reflects the employees hired during the year, without considering the number of employees who left the job.
Source of data	Employment report Excel document: Greentech's SDG indicators_year2017-sept2023_HR.xls
Value(s) applied	2021: 34 2022: 49 2023: 0
Measurement methods and procedures	The human resources department monthly records this parameter into Revisal software and employment reports.
Monitoring frequency	Monthly
QA/QC procedures	The HR department monthly records this parameter.
Purpose of data	To measure the impact of SDG 3
Additional comments	-

Monitoring parameter no. 2

Relevant SDG Indicator	**SDG3 Good Health and Well Being**
Data/Parameter	Number of training sessions on safety and health at working environment
Unit	-
Description	The number of training sessions on safety and health at the recycling plants
Source of data	The recycling plant, internal reports on trainings
Value(s) applied	2021: 536 2022: 536 2023: 524
Measurement methods and procedures	The Health&Safe department monthly records this parameter.
Monitoring frequency	Monthly

QA/QC procedures	The Health&Safe department monthly records this parameter according to ISO 9001 procedure. Health and Safety trainings per employee are accountable using the following rules: - they are done with the frequency of four times per year/employee working in production, deducting the persons who left the job in the reporting month - they are done with the frequency of two times per year per office employees, deducting the persons who left the job in the reporting month - at the very first day the employee is hired. As counted in training sessions, the following rules applies: - every shift of production sector (4 shifts and 7 sectors) is trained 4 times per year - every supporting department is trained 2 times per year - separate session for newly hired Emergency situation trainings per employee are accountable using the following rules: - they are done with the frequency of one time per month in production deducting the persons who left the job in the reporting month - they are done with the frequency of three times per year per office employee, deducting the persons who left the job in the reporting month - at the very first day the employee is hired As counted in training sessions, the following rules applies: - every shift of production sector (4 shifts and 7 sectors) is trained times per year - every supporting department is trained 3 times per year - separate session for newly hired The registration of the existing trainings is found in the Individual File of Working Protection, a manual file of each employee with holographic signature.
Purpose of data	To measure the impact of SDG 3

Additional comments	We present below the topics covered during these training courses, who offers them and what are the instruments used for trainings: i) when an employee is hired training are given by the health and safety specialist: details about company activity and the regulations and procedures and production flow, general presentation of legislation in regards of health and safety; responsibilities and obligation of both contractual parties - employee and employer; general risk assessment, organization of the H&S department, consequences for when rules are not respected; accidental risks and professional diseases specific for the activity and the measures to prevent them; events, working accidents standard procedure about how to act. After the training, the employee receives a test with regards of what he has been trained. ii) On specific working place the training is done by the health and safety specialist together with the manager of the working place: specific instruction, detailed presentation of the rules and procedures within that working place, risk assessment, accidental risk and professional disease for that working place and the measures to prevent, first aid procedure, practical demonstration about the correct way to work, the correct way to use the working equipment and the protection equipment, program and cleaning procedure. iii) The training instruments: written documents concluding the procedures, special instructions, movies, PowerPoint presentation, listed specific legislation.

Monitoring parameter no. 3

Relevant SDG Indicator	**SDG 3 Good Health and Well Being**
Data/Parameter	Number of trainings on fire and safe protection
Unit	-
Description	The number of trainings on fire and safe protection provided at the recycling plants
Source of data	The recycling plant, internal reports on trainings
Value(s) applied	2021: 24 2022: 24 2023: 24
Measurement methods and procedures	The Health&Safe department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The Health&Safe department monthly records this parameter according to ISO 9001 procedure. Number of trainings on fire and safe protection are done with a frequency of one time per month per location.
Purpose of data	To measure the impact of SDG 3
Additional comments	-

Monitoring parameter no. 4

Relevant SDG Indicator	**SDG 4 Quality Education**
Data/Parameter	Number of visits of school children to the plant to enhance environment education and climate change awareness
Unit	-
Description	The number of visits of school children to the plant to enhance environment education and climate change awareness
Source of data	The recycling plant internal reports on visits
Value(s) applied	2021: 8 2022: 3 2023: 28
Measurement methods and procedures	The PR department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The PR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 4
Additional comments	-

Monitoring parameter no. 5

Relevant SDG Indicator	**SDG 4 Quality Education**
Data/Parameter	Number of children and students trained on recycling, sustainable development and circular economy
Unit	-
Description	The number of children and students trained on recycling, sustainable development and circular economy
Source of data	The recycling plant internal reports on the number of trainees
Value(s) applied	2021: 350 2022: 63 2023: 2170
Measurement methods and procedures	The PR department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The PR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 4
Additional comments	-

Monitoring parameter no. 6

Relevant SDG Indicator	**SDG 4 Quality Education**
Data/Parameter	Number of training sessions to promote recycling and sustainable development
Unit	-

Description	The number of training sessions held by the project to promote recycling and sustainable development. The target audience are the educational institutions: schools, high schools and universities, through their students.
Source of data	The recycling plant internal reports on the number of trainings
Value(s) applied	2021: 7 2022: 9 2023: 32
Measurement methods and procedures	The PR department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The PR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 4
Additional comments	-

Monitoring parameter no. 7

Relevant SDG Indicator	**SDG 5 Gender Equality**
Data/Parameter	Number of women employed by project activity
Unit	-
Description	The number of women employed by the project activity
Source of data	Employment report Excel document: Greentech's SDG indicators_year2017-sept2023_HR.xls
Value(s) applied	2021: 266 2022: 232 2023: 194
Measurement methods and procedures	The HR department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The HR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 5
Additional comments	-

Monitoring parameter no. 8

Relevant SDG Indicator	**SDG 5 Gender Equality**
Data/Parameter	Proportion of women in total employment
Unit	-
Description	The proportion of women in total number of employees of the project
Source of data	Employment report Excel document: Greentech's SDG indicators_year2017-sept2023_HR.xls

Value(s) applied	2021: 37% 2022: 36% 2023: 34%
Measurement methods and procedures	The HR department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The HR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 5
Additional comments	-

Monitoring parameter no. 9

Relevant SDG Indicator	**SDG 5 Gender Equality**
Data/Parameter	Number of women in managerial positions
Unit	-
Description	The number of women in managerial positions
Source of data	Employment report Excel document: Greentech's SDG indicators_year2017-sept2023_HR.xls
Value(s) applied	2021: 7 2022: 8 2023: 10
Measurement methods and procedures	The HR department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The HR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 5
Additional comments	-

Monitoring parameter no. 10

Relevant SDG Indicator	**SDG 5 Gender Equality**
Data/Parameter	Proportion of women in managerial positions in total management positions
Unit	-
Description	The proportion of women in managerial positions in total number of managers
Source of data	Employment report Excel document: Greentech's SDG indicators_year2017-sept2023_HR.xls
Value(s) applied	2021: 42% 2022: 47% 2023: 59%
Measurement methods and procedures	The HR department monthly records this parameter.
Monitoring frequency	Monthly

QA/QC procedures	The HR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 5
Additional comments	-

Monitoring parameter no.11

Relevant SDG Indicator	**SDG 7 Affordable and Clean Energy**
Data/Parameter	Energy Savings
Unit	MWh
Description	The energy savings of the recycling project compared to the baseline scenario
Source of data	Excel document SDG 7.1_CO2 Calculation_Greentech_savings energy- 01.11.2023
Value(s) applied	2021: 43,616 2022: 26,368 2023: 19,023
Measurement methods and procedures	Calculated as per the methodology: $Q_{PET\ flakes} * SEC_{BL,PET} - EC_{PET,y}$
Monitoring frequency	Yearly
QA/QC procedures	The operational department annually calculates this parameter.
Purpose of data	To calculate the impact of SDG 7
Additional comments	-

Monitoring parameter no.12

Relevant SDG Indicator	**SDG 7 Affordable and Clean Energy**
Data/Parameter	Fuel Savings
Unit	MWh
Description	The energy savings of the recycling project compared to the baseline scenario
Source of data	Excel document SDG 7.2_CO2 Calculation_Greentech_savings fuels - 01.11.2023
Value(s) applied	2021: 216,668 2022: 142,174 2023: 96,811
Measurement methods and procedures	Calculated as per the methodology: $Q_{PET\ flakes} * SFC_{BL,PET} - FF_{LFO,y} - FF_{diesel,y} - FF_{gasoline,y} - FF_{natural\ gas,y}$
Monitoring frequency	Yearly
QA/QC procedures	The operational department annually calculates this parameter.
Purpose of data	To calculate the impact of SDG 7
Additional comments	-

Monitoring parameter no.13

Relevant SDG Indicator	**SDG 8 Decent Work and Economic Growth**
Data/Parameter	Number of staff employed in the project activity
Unit	-
Description	The number of employees at the recycling plants
Source of data	Employment report Excel document: Greentech's SDG indicators_year2017-sept2023_HR.xls
Value(s) applied	2021: 707 2022: 652 2023: 566
Measurement methods and procedures	The HR department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The HR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 8
Additional comments	-

Monitoring parameter no.14

Relevant SDG Indicator	**SDG 8 Decent Work and Economic Growth**
Data/Parameter	Number of trainings regarding the technical services required to operate the recycling plant
Unit	-
Description	The number of trainings regarding the technical services required to operate the recycling plants
Source of data	Training reports Excel document: SDG 8.2_instruire 2021-2023 training tehnic.xlsx
Value(s) applied	2021: 8 2022: 10 2023: 6
Measurement methods and procedures	The operational department monthly records this parameter.
Monitoring frequency	Yearly
QA/QC procedures	The operational department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 8
Additional comments	-

Monitoring parameter no.15

Relevant SDG Indicator	**SDG 8 Decent Work and Economic Growth**
Data/Parameter	Number of suggestions, recommendations made by the employees
Unit	-

Description	The number of suggestions, recommendations made by the employees of the recycling plants
Source of data	Employees Feedback Book Excel document: SDG 8_3_Employee proposals_2019_2023.xls
Value(s) applied	2021: 185 2022: 171 2023: 56
Measurement methods and procedures	The HR department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The HR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 8
Additional comments	-

Monitoring parameter no.16

Relevant SDG Indicator	**SDG 8 Decent Work and Economic Growth**
Data/Parameter	Wage bonuses offered by the employer to the employees
Unit	Euro
Description	Wage bonuses offered by the employer/project developer to the employees
Source of data	Payroll software Excel document: Greentech's SDG indicators_year2017-sept2023_HR.xls
Value(s) applied	2021: 825,058 2022: 980,935 2023: 650,244
Measurement methods and procedures	The HR department monthly records this parameter.
Monitoring frequency	Monthly
QA/QC procedures	The HR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 8
Additional comments	-

Monitoring parameter no.17

Relevant SDG Indicator	**SDG 9 Industry, Innovation and Infrastructure**
Data/Parameter	Number of local people employed by the project activity
Unit	-
Description	The number of local people employed by the recycling plants
Source of data	Employment report Excel document: Greentech's SDG indicators_year2017-sept2023_HR.xls
Value(s) applied	2021: 689 2022: 631 2023: 557

Measurement methods and procedures	The HR department monthly records this parameter
Monitoring frequency	Monthly
QA/QC procedures	The HR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 9
Additional comments	-

Monitoring parameter no.18

Relevant SDG Indicator	**SDG 9 Industry, Innovation and Infrastructure**
Data/Parameter	Proportion of local people employed in total number of employees
Unit	-
Description	The percentage of local employees in total number of staff employed
Source of data	Employment report Excel document: Greentech's SDG indicators_year2017-sept2023_HR.xls
Value(s) applied	2021: 97% 2022: 97% 2023: 98%
Measurement methods and procedures	The HR department monthly records this parameter
Monitoring frequency	Monthly
QA/QC procedures	The HR department monthly records this parameter according to ISO 9001 procedure.
Purpose of data	To measure the impact of SDG 9
Additional comments	-

Monitoring parameter no.19

Relevant SDG Indicator	**SDG 10 Reduce inequalities within and among countries**
Data/Parameter	Foreign exchange saved
Unit	Euro
Description	Foreign exchange saved represents the plastic saved/recycled by the project multiplied by the imported price/tonne
Source of data	PET recycling plant internal financial document Excel document: SDG10_1_2017-2023_financiar
Value(s) applied	2021: 4,902,274 2022: 12,863,201 2023: 1,897,796
Measurement methods and procedures	The Financial department annually calculates this parameter
Monitoring frequency	Yearly
QA/QC procedures	The Financial department annually calculates this parameter
Purpose of data	To measure the impact of SDG 9
Additional comments	-

Monitoring parameter no.20

Relevant SDG Indicator	**11. Sustainable Cities and Communities**
Data/Parameter	Quantity of the municipal plastic waste collected by the project activity
Unit	ton
Description	Quantity of municipal solid waste/PET bales for flakes collected at the recycling facility in year y ($Q_{B\ PET,\ y}$)
Source of data	PET recycling plant Excel document: SDG11_1_2017-2023_financiar
Value(s) applied	2021: 74,430 2022: 51,805 2023: 40,092
Measurement methods and procedures	Measured by weight balances
Monitoring frequency	Monthly
QA/QC procedures	Direct weighing and recording of the weight. The balance is calibrated every 5 years.
Purpose of data	To measure the impact of SDG 11
Additional comments	-

Monitoring parameter no.21

Relevant SDG Indicator	**11. Sustainable Cities and Communities**
Data/Parameter	Project plastic waste collected quantity
Unit	ton
Description	Project plastic waste collected quantities by sources
Source of data	PET recycling plant Excel document: SDG11_2_2017-2023
Value(s) applied	2021: 0 2022: 0 2023: 0
Measurement methods and procedures	Measured by weight balances
Monitoring frequency	Monthly
QA/QC procedures	Direct weighing and recording of the weight The balance is calibrated every 5 years.
Purpose of data	To measure the impact of SDG 11 and prove that there is no competing use of plastic waste material in the region.
Additional comment	-

Monitoring parameter no.22

Relevant SDG Indicator	**12. Responsible Consumption and Production**

Data/Parameter	Quantity of plastic material recycled per year
Unit	ton
Description	Quantity of plastic type i recycled in year y ($Q_{PET\ FLAKES, y}$)
Source of data	PET recycling plant Excel document: SDG12_1_2017-2023_financiar
Value(s) applied	2021: 56,002 2022: 36,917 2023: 24,534
Measurement methods and procedures	Measured by Weight balance
Monitoring frequency	Monthly
QA/QC procedures	Direct weighing and recording of the weight Cross-check with the mass of product(s) used at the processing/ manufacturing facility using production records. The balance is calibrated every 5 years
Purpose of data	To measure the impact of SDG 12
Additional comment	-

Monitoring parameter no.23

Relevant SDG Indicator	**12. Responsible Consumption and Production**
Data/Parameter	Number of programs to encourage more environmentally-friendly and responsible products and services
Unit	-
Description	Number of programs to encourage more environmentally-friendly and responsible products and services
Source of data	Internal reports on communication campaigns, PR department
Value(s) applied	2021: 1 2022: 7 2023: 8
Measurement methods and procedures	Recorded by the PR department
Monitoring frequency	Annually
QA/QC procedures	The PR department annually monitors this parameter.
Purpose of data	To estimate SDG 12
Additional comment	-

Monitoring parameter no.24

Relevant SDG Indicator	**13. Climate Change**
Data/Parameter	Emissions Reductions
Unit	tCO2e
Description	The CO2 emissions savings calculated according to the methodology
Source of data	Excel sheet on ERs SDG13_CO2 savings_01Jan2021-30Sept2023_07.05.2024.xlsx

Value(s) applied	2021: 51,569 2022: 32,165 2023: 22,891
Measurement methods and procedures	The technical department provides the calculation of the ERs according to the methodology
Monitoring frequency	Annually
QA/QC procedures	Calculated by the technical department according to the methodology
Purpose of data	To measure the impact of SDG 13
Additional comment	-

Monitoring parameter no.25

Relevant SDG Indicator	**13. Climate Change**
Data/Parameter	**$EC_{PETflakes,y}$**
Unit	MWh/y
Description	Electricity consumption at recycling facility for total PET flakes in year y
Source of data	Measured from the recycling plant
Value(s) applied	2021: 18,545 2022: 14,610 2023: 8,210
Measurement methods and procedures	Metering with calibrated equipment
Monitoring frequency	Monthly
QA/QC procedures	Measured with calibrated equipment. The recycling plant checks completeness of invoices concerning electricity consumption. The recycling plant checks at least monthly, if consumption fit to the produced quantities. The electricity meter is calibrated every 5 years.
Purpose of data	To calculate Project emissions
Additional comment	-

Monitoring parameter no.26

Relevant SDG Indicator	**13. Climate Change**
Data/Parameter	**$FC_{i,y}$**
Unit	MWh/year
Description	Fuel consumption of the recycling facility apportioned to material type i
Source of data	Measured from the recycling plant

Value(s) applied	Natural gas 2021: 15,161 2022: 10,264 2023: 4,399 Diesel 2021: 1,510 2022: 1,379 2023: 1,013 Gasoline 2021: 1.510 2022: 2.610 2023: 1.140
Measurement methods and procedures	Metering with calibrated equipment and transformed in MWh
Monitoring frequency	Monthly
QA/QC procedures	The recycling plant checks completeness of invoices concerning fuel consumption. The recycling plant checks at least monthly, if consumption fit to the produced quantities.
Purpose of data	To calculate project emissions
Additional comment	-

Monitoring parameter no.27

Relevant SDG Indicator	**13. Climate Change**
Data/Parameter	Intrinsic Viscosity
Unit	decilitres/gram (dL/g)
Description	Intrinsic Viscosity
Source of data	The Davenport Petplu software / Internal quality reports Excel document: Climate Action_27_2021_2022_2023
Value(s) applied	2021: 0,699 - 0,757 2022: 0,699 - 0,797 2023: 0,629 - 0,764
Measurement methods and procedures	Test method for determining Intrinsic viscosity is as per ASTM D 4603 "Standard test method for determining Viscosity of Polyethylene Terephthalate" for PET
Monitoring frequency	Every batch of polymerisation
QA/QC procedures	The recycling plant regularly checks the intrinsic viscosity of the products through the internal procedure IL-GRT-11RPET
Purpose of data	To compare the chemical equivalence
Additional comment	-

Monitoring parameter no.28

Relevant SDG Indicator	**13. Climate Change**
Data/Parameter	Romania plastic generated waste
Unit	tons

Description	Romania plastic generated waste
Source of data	ANPM – Romanian Agency of Environment Protection documents
Value(s) applied	2021: 329,148 2022: 331,848 2023: 248,886
Measurement methods and procedures	N/A
Monitoring frequency	Yearly
QA/QC procedures	The recycling plant annually monitors this parameter, according to the new implemented procedure regarding the monitoring of all parameters requested by the Project.
Purpose of data	To prove that there is no competing use of waste material in the region
Additional comment	-

Monitoring parameter no.29

Relevant SDG Indicator/Safeguarding Principle	**SDG 10 Reduce inequalities within and among countries**
Data / Parameter	Plastic imported in country (tons/year)
Unit	tons
Description	Plastic waste imported by the project activity
Source of data	Internal reports on imports
Value(s) applied	2021:36,922 2022:28,237 2023:29,078
Measurement methods and procedures	N/A
Monitoring frequency	Yearly
QA/QC procedures	The recycling plant annually monitors this parameter, according to the procedure regarding the monitoring of all parameters requested by the Project.
Purpose of data	To prove that there is no competing use of waste material in the region
Additional comment	-

Monitoring parameter no.30

Relevant SDG Indicator/Safeguarding Principle	**Environmental Safeguard Principle – Air Quality**
Data / Parameter	Inside emissions (Natrium Hidroxid - NaOH); Outside ambient emissions (CO, NOx, SO2, O2, dust at chimney)
Unit	NaOH: mg/mc

Description	The inside and outside emissions measured in the recycling plant
Source of data	Analysis reports by authorised laboratory
Value(s) applied	2021: 0.038 & 0.76 2022: 0.147 & 0.313 2023: 0.123 & 0.555
Measurement methods and procedures	Measured and analised by authorised laboratories: Folders: "Water&air&waste measurement_2021-2023(sept)" "Microclimate_ 2021-2022- 2023_H&S"
Monitoring frequency	Semestrial
QA/QC procedures	The recycling plant measures the inside and outside emissions according to ISO procedures.
Purpose of data	To monitor the Safeguard Principle
Additional comment	-

Monitoring parameter no.31

Relevant SDG Indicator/Safeguarding Principle	**Environmental Safeguard Principle – Air Quality**
Data / Parameter	Inside air humidity (%) :
Unit	%
Description	The air humidity measured in the interior of the recycling plant
Source of data	Analysis reports by authorised laboratory: "Microclimate_ 2021-2022- 2023_H&S"
Value(s) applied	2021: 35.7% - 69.3% 2022: 42.9% - 65.3% 2023: 28.8% - 48.2%
Measurement methods and procedures	Measured and analised by authorised laboratories
Monitoring frequency	Monthly
QA/QC procedures	The recycling plant measures monthly the inside air humidity according to ISO procedures.
Purpose of data	To monitor the Safeguard Principle
Additional comment	-

Monitoring parameter no.32

Relevant SDG Indicator/Safeguarding Principle	**Environmental Safeguard Principle – Air Quality**
Data / Parameter	Inside air temperature (Celsius)
Unit	Celsius
Description	The air temperature measured in the interior of the recycling plant
Source of data	Analysis reports by authorised laboratory: Folder "Microclimate_ 2021-2022- 2023_H&S"

Value(s) applied	2021: 24.9C- 30.7C 2022: 26.9C - 34C 2023: 25.1C – 29.8C
Measurement methods and procedures	Measured and analised by authorised laboratories
Monitoring frequency	Monthly
QA/QC procedures	The recycling plant measures monthly the inside air temperature according to ISO procedures.
Purpose of data	To monitor the Safeguard Principle
Additional comment	-

Monitoring parameter no.33

Relevant SDG Indicator/Safeguarding Principle	**Environmental Safeguard Principle – Water**
Data / Parameter	Quality of the used water (pH, suspended dust, clorours, phospphats, total azote)
Unit	Unit pH mg/l
Description	The quality of the output used water regarding the pH, suspended dust, clorours, phospphats and total azote
Source of data	Analysis reports by authorised laboratory: Folder "Water&air&waste measurement_2021-2023(sept)"
Value(s) applied	2021: pH: 7 – 7.6 Suspended dust: 11 – 19.4 Clorours: 159 - 186 Phospphats: 0.12 – 0.27 Azote: 4.8 - 5.75 2022: pH: 6.7 – 7.5 Suspended dust: 12 – 21 Clorours: 172 - 214 Phospphats: 0.11 – 0.13 Azote: 4.8 - 5.6 2023: pH: 6.7 – 7.4 Suspended dust: 10 – 16 Clorours: 164 - 191 Phospphats: 0.08 – 0.19 Azote: 0
Measurement methods and procedures	Measured and analised by authorised laboratories
Monitoring frequency	Every two months
QA/QC procedures	The recycling plant measures the quality of the used water according to ISO procedures.
Purpose of data	To monitor the Safeguard Principle
Additional comment	-

Monitoring parameter no.34

Relevant SDG Indicator/Safeguarding Principle	**Environmental Safeguard Principle – Water**
Data / Parameter	Output used water (m3/year)
Unit	m3
Description	The used water evacuated by the project
Source of data	The output water report : "Water&air&waste measurement_2021-2023(sept)"
Value(s) applied	2021: 405,939 m3 2022: 325,869 m3 2023: 196,702 m3
Measurement methods and procedures	Measured at the recycling plant according to internal procedures.
Monitoring frequency	Annualy
QA/QC procedures	Measured with calibrated equipment according to internal procedure
Purpose of data	To monitor the Safeguard Principle
Additional comment	-

Monitoring parameter no.35

Relevant SDG Indicator/Safeguarding Principle	**Environmental Safeguard Principle – Other Pollutants**
Data / Parameter	Noise Pollution
Unit	dB
Description	The noice pollution of equipments at the recycling plant
Source of data	Analysis reports by authorised laboratory: "Microclimate_ 2021-2022- 2023_H&S"
Value(s) applied	2021: 71 - 96.1 2022: 70.7 – 100.2 2023: 70.7 – 90.7
Measurement methods and procedures	Measured and analised by authorised laboratories
Monitoring frequency	Quaterly
QA/QC procedures	The recycling plant measures the noise pollution according to ISO procedures.
Purpose of data	To monitor the Safeguard Principle
Additional comment	-

Monitoring parameter no.36

Relevant SDG Indicator/Safeguarding Principle	**Environmental Safeguard Principle – Other Pollutants**
Data / Parameter	**Waste measurements by type of waste (package, carton, waste wood, aluminum waste)**

Unit	Kg.
Description	Output waste measurements by type of waste
Source of data	Internal waste reports: "Water&air&waste measurement_2021-2023(sept)"; Centralised wastes 2021-2023.xls
Value(s) applied	2021 Package waste: 141,548 Cardboard waste: 42,584 Wood waste: 34,869 Aluminum waste: 67,698 2022 Package waste: 174,150 Cardboard waste: 49,358 Wood waste: 43,469 Aluminum waste: 28,380 2023 Package waste: 97,771 Cardboard waste: 40,338 Wood waste: 94,953 Aluminum waste: 34,727
Measurement methods and procedures	Measured by the production department according to internal procedures
Monitoring frequency	Annualy
QA/QC procedures	Direct weighing and recording of the weight used at the processing/ manufacturing facility using production records
Purpose of data	To monitor the Safeguard Principle
Additional comment	-

Monitoring parameter no.37

Relevant SDG Indicator/Safeguarding Principle	**Social safeguarding principle – Community Health, Safety and Working Conditions**
Data / Parameter	Claims or concerns of the employees
Unit	The number of claims and concerns from employees
Description	The number of claims and concerns from the employees
Source of data	Internal HR and Legal Reports
Value(s) applied	2021: 0 2022: 0 2023: 0
Measurement methods and procedures	Recorded by the HR and legal departments
Monitoring frequency	Annualy
QA/QC procedures	The recycling plant annually monitors this parameter according to internal procedure.
Purpose of data	To monitor the Safeguard Principle
Additional comment	-

D.3. Comparison of monitored parameters with last monitoring period

Not applicable for non-Community Service Activities.

D.4. Implementation of sampling plan

No sampling plan implemented.

SECTION E. CALCULATION OF SDG IMPACTS

E.1. Calculation of baseline value or estimation of baseline situation of each SDG Impact

SDG 13 Climate Action - Emissions reductions

According to the applied methodology AMS.III.AJ_version 06.0, the approach of calculating the baseline emissions of SDG 13 is shown below.

$BE_y = (Q_{PET\ FLAKES})*L_{PET}*B_i*(SEC_{BL,PET} * EF_{el\ CO2,PET} + SFC_{BL,PET} * EF_{FFCO2,\ PET})$

Where:

BE_y: Baseline emissions in year y (tCO_2/y)
$Q_{PET\ FLAKES}$: Quantity of PET FLAKES recycled in year y, (t)
L_{PET}: Net to gross adjustment factor to cover degradation in material quality and material loss in the production process of the final product using the recycled material = 0,75
$EF_{elCO2,PET}$: CO_2 emission factor for energy consumption in the production of virgin PET (t CO_2/t INPUT PET Waste)
$SEC_{BL,PE}$: Specific electricity consumption at virgin PET production facility (MWh/t)
$EF_{FFCO2,\ PET}$: CO_2 emission factor for natural gas consumption (tCO_2/GJ)
$SFC_{BL,PET}$: Specific fuel consumption at virgin PET production facility (GJ/t)
$B_i = 1$

The actual GHG emissions reduction calculation, baseline and project emissions calculation, according to the applicable methodology, are provided into a separate Excel document: "Greentech SDG13_CO2 Savings_01Jan2021-30Sept2023_07.05.2024.xls".

SDG 7 Affordable and Clean Energy

Target 7.3: By 2030, double the global rate of improvement in energy efficiency.

Project Indicators for SDG 7:
- SDG 7_1 Energy Savings
- SDG 7_2 Fuel Savings

SDG 7_1 Energy Savings

The Baseline for SDG 7_1 is calculated using the following equation:

$BE_{El,y} = Q_{PET\ FLAKES} * SEC_{BL,PET}$

Where:
$BE_{El,y}$: Baseline of the electricity in year y (MWh)
$Q_{PET\ FLAKES}$: Quantity of PET FLAKES recycled in year y, (t)
$SEC_{BL,PE}$: Specific electricity consumption at virgin PET production facility (MWh/t)

SDG 7_2 Fuel Savings

The Baseline of SDG 7_2 is calculated using the following equation:

$BE_{Fuel,y} = Q_{PET\ FLAKES} * SFC_{BL,PET}$

Where:
$B_{Fuel,y}$: Baseline of fuel in year y (MWh)
$Q_{PET\ FLAKES}$: Quantity of PET FLAKES recycled in year y, (t)
$SFC_{BL,PET}$: Specific fuel consumption at virgin PET production facility (GJ/t)
1MWh = 3,6 GJ

The actual values of baseline calculation and project emissions of SDG 7_1 Energy Saving and SDG7_2 Fuel Saving are provided into the Excel documents:
"SDG 7.1_CO2 Calculation_Greentech_savings energy - 07.05.2024.xls" and
"SDG 7.2_CO2 Calculation_Greentech_savings fuels - 07.05.2024.xls

Calculation of Baseline for SDG 3, 4, 5, 8, 9, 10, 11 and 12

For all other SDGs of the project (with the exception of SDG 7 and SDG 13 specified above), the Baseline is zero since in the absence of the project, none of those indicators have been existed.

More specifically, the baseline of these parameters is explained below:

SDG 3 Good Health and Well Being

The project creates new jobs and consequently health financing, and many training are offered to the health workforce, contributing thus to the Target 3.c:

Target 3.c: „Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States."

Project Indicators for SDG 3:

1. Number of new health workforce recruited each year
2. Number of training sessions on safety and health at working environment
3. Number of trainings on fire and safe protection (PSI trainings)

Baseline situation:

In the baseline situation, no new job created, no training sessions on safety and health at working environment, nor any trainings on fire and safe protection are provided to the employees.

Therefore, the baseline outcome benefit is zero.

SDG 4 Quality Education

Trough its educational programs and trainings on recycling, sustainable development, climate change and circular economy, the project actively contributes to the Target 4.7:

Target 4.7: „By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development."

Project Indicators for SDG 4:

1. Number of visits of school children to the plant to enhance environment education and climate change awareness
2. Number of children and students trained on recycling, sustainable development and circular economy.
3. Number of trainings organised with the occasion of different events and fairs to promote recycling and sustainable development

Baseline situation:

In the baseline situation, no visits of school children to the plant to enhance environment education and climate change awareness, no children and students trained on recycling, sustainable development and circular economy, and no trainings to promote recycling and sustainable development. Thus, the baseline outcome benefit is zero.

SDG 5 Gender Equality

One of the main benefits of the project is its approach toward gender equality, women being promoted in management position, including the high level management, contributing to the Target 5.5:

Target 5.5: „Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life."

Project Indicators for SDG 5:

1. Number of women employed by project activity
2. Proportion of women in total employment
3. Number of women in managerial positions
4. Proportion of women in managerial positions in total management positions

Baseline situation:

In the baseline situation, there were no women employed, nor held any management positions. Therefore, the baseline outcome benefit is zero.

SDG 8 Decent work and economic growth contribution

Through the project activities, it will create jobs which contribute to the target 8.5:

Target 8.5: „By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value."
The number of jobs created by the project with safe and healthy work environment together with number of trainings regarding the technical services required to operate the recycling plant, the number of suggestions and recommendations made by the employees are recorded by the PP. At the same time, wage bonuses offered by the employer to the employees are quantified and contribute at the development of SDG 8.

Project indicators for SDG 8:

1. Number of staff employed in the project activity
2. Number of trainings regarding the technical services required to operate the recycling plant
3. Number of suggestions and recommendations made by the employees
4. Wage bonuses offered by the employer to the employees

Baseline situation:

In baseline situation, no jobs created, no training sessions regarding the operational side of the plant equipment is done, nor any suggestions or recommendations registered or any wage bonuses offered. Therefore, baseline outcome benefit is zero.

SDG 9 Industry Innovation and Infrastructure
The project largely contributes to the employment of local people and, thus, making its contribution to Target 9.2.

Target 9.2: "Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries."

Project Indicators for SDG 9:

1. Number of local people employed in the project activity
2. Proportion of local people employed in total number of employees

Baseline situation:

In the baseline situation, there are not any local people employed. Thus, baseline outcome benefit is zero.

SDG 10 Reduce inequalities within and among countries

Through its plastic recycling activities, the project save foreign exchange, which contributes to the reducing inequalities among countries and ensure the achievement of Target 10.3**.**

Targets 10.3: „Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this."

Project Indicator for SDG 10:

1. Foreign exchange saved by the project (plastic saved/recycled x imported price/tonne)

Baseline situation:

In the baseline situation, there is no foreign exchage saved. Therefore, baseline outcome benefit is zero.

SDG 11 Sustainable Cities and Communities

The project positively contributes to the reduction of the municipal plastic waste through its collection and recycling activities, having a significant impact on Target 11.6.

Targets 11.6: "By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management."

Project Indicators for SDG 11:

8.1 Quantity of the municipal plastic waste collected by the project activity
8.2. Project plastic waste collected quantities

Baseline situation:

In the baseline situation, there is no municipal plastic waste collected or any project plastic collected. Thus, the baseline outcome benefit is zero.

SDG 12 Responsible consumption and production

Through the project activities, there is recycled plastic material (intermediate output product) used in the production of recycled end products and also programs. At the same time, the project developer supports communication campaigns to encourage the responsible consumption and reuse of products, all contributing to the target 12.5.

Target 12.5: "By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse."

Project Indicators for SDG 12:
1. Quantity of plastic material recycled per year
2 Number of programs (communication campaigns) to encourage more environmentally-friendly and responsible products and services

Baseline situation:
In baseline situation, there is no recycled plastic material as output, nor any communication campaigns to encourage the responsible consumption and reuse of products. Therefore, baseline outcome benefit is zero.

The actual values of baseline and project situation of SDG 3, 4, 5, 8, 9, 10, 11 and 12 are provided into the Excel document "Greentech SDG indicators_MR03_01Jan2021-30Sept2023_07.05.2024.xls ".

E.2. Calculation of project value or estimation of project situation of each SDG Impact

SDG 13 Climate Action - Emissions reductions

According to the applied methodology AMS.III.AJ_version 06.0, the approach of calculating the project emissions and net outcome of SDG 13 is shown below.

Project emissions for the monitoring report are calculated using the following equation:

As per Equation (5) of the applied methodology:
$PE_y = PE_{PET\ FLAKES,y,}\ (tCO_2)$
$PE_{PET\ FLAKES,\ y} = EC_{PET\ flakes,y} * EF_{el,y} + FF_{LFO\ flakes,y} * EF_{LFO\ flakes,y} + FF_{diesel\ for\ flakes,y} * EF_{diesel\ for\ flakes,y} + FF_{gasoline\ for\ flakes,y} * EF_{gasoline\ for\ flakes,y} + FF_{natural\ gas\ for\ flakes,y} * EF_{natural\ gas\ for\ flakes,y},\ (tCO_2)$

Where:
PE_y: Project emissions in year y, (tCO_2)

Where:
$EC_{PET\ flakes,y}$ = Electricity consumption (production +administration) for flakes in year y, (MWh)
$EF_{el,y}$ = Emission Factor for Electricity Generation for flakes in year y,(tCO2/MWh)
$FF_{LFO\ flakes,y}$ = Fossil fuel LFO consumption (light liquid fuel) for flakes in year y, (MWh)
$EF_{LFO\ flakes,y}$ = Emission Factor for LFO for flakes in year y, (tCO_2/MWh)
$FF_{diesel\ for\ flakes,y}$ = Fossil fuel Diesel consumption for flakes in year y, (MWh)
$EF_{diesel\ for\ flakes,y}$ = Emission Factor for Diesel for flakes in year y, (tCO_2/MWh)
$FF_{gasoline\ for\ flakes,y}$ = Fossil fuel gasoline consumption for flakes in year y, (MWh)
$EF_{gasoline\ for\ flakes,y}$ = Emission Factor for gasoline for flakes in year y, (tCO_2/MWh)
$FF_{natural\ gas\ for\ flakes,y}$ = Fossil fuel natural gas-consumption for flakes in year y, (MWh)
$EF_{natural\ gas\ for\ flakes,y}$ = Emission Factor for natural gas for flakes in year y, (tCO_2/MWh)

1MWh = 3,6 GJ

The emission reductions achieved by the project activity shall be determined as the difference between the baseline emissions and the project emissions and leakage.

$$ER_y = BE_y - PE_y - L_y$$

Where:

ER_y = Emission reductions in year y (t CO2e)

L_y = Leakage emissions in year y (t CO2e)

Since MSW collected does not contain organic biogenic waste segregated in the recycling facility, no leakage calculation is required.

The emission reductions achieved by the project activity will be the difference between the baseline emissions and the project emissions.

Equation (1): $ER_y = BE_y - PE_y$

Where:
ER_y: Emission reductions in year y (tCO2)
BE_y: Baseline emissions in year y (tCO2)
PE_y: Project emissions in year y (tCO2)

SDG 7 Affordable and Clean Energy

The approach of estimating the project indicator and net benefit is the following.

Target 7.3: By 2030, double the global rate of improvement in energy efficiency.

Project Indicators for SDG 7:
- **7_1. Energy Savings**
- **7_2. Fuel Savings**

SDG 7_1. Energy Savings

Project outcome SDG7_1 = $EC_{PET\ flakes,y}$ (MWh)
Where:
$EC_{PET\ flakes,y}$ = Electricity consumption (production +administration) for flakes in year y, (MWh)

The electricity consumption is measured yearly with calibrated equipment.

The Net benefit of SDG7_1 is calculated using the following formula:

Net benefit of SDG7_1 = Baseline outcome of SDG7_1 - Project outcome of SDG7_1

Net benefit SDG7_1 = $Q_{PET\ FLAKES}$* $SEC_{BL,PET}$ - $EC_{PET\ flakes,y}$

SDG 7_2 Fuel Savings

Project outcome SDG7_2 = $FF_{LFO\ flakes,y}$ + $FF_{diesel\ for\ flakes,y}$ + $FF_{gasoline\ for\ flakes,y}$ + $FF_{natural\ gas\ for\ flakes,y}$

Where:
$FF_{LFO\ flakes,y}$ = Fossil fuel LFO consumption (light liquid fuel) for flakes in year y, (MWh)
$FF_{diesel\ for\ flakes,y}$ = Fossil fuel Diesel consumption for flakes in year y, (MWh)
$FF_{gasoline\ for\ flakes,y}$ = Fossil fuel gasoline consumption for flakes in year y, (MWh)
$FF_{natural\ gas\ for\ flakes,y}$ = Fossil fuel natural gas-consumption for flakes in year y, (MWh)

All fuel consumptions are measured yearly at the recycling plant with calibrated equipment.

The Net benefit of SDG7 (2) is calculated using the following formula:

Net benefit SDG7_2 = Baseline outcome of SDG7_2 - Project outcome of SDG7_2

Net benefit of SDG7_2 = $Q_{PET\ FLAKES}$* $SFC_{BL,PET}$ - $FF_{LFO\ flakes,y}$ - $FF_{diesel\ for\ flakes,y}$ - $FF_{gasoline\ for\ flakes,y}$ - $FF_{natural\ gas\ for\ flakes,y}$

Calculation of Project value and net benefit for SDG 3, 4, 5, 8, 9, 10, 11, 12

As already explained, for all other SDGs of the project (with the exception of SDG 7 and SDG 13), the Baseline is zero since in the absence of the project, none of those indicators have been existed.

Therefore, the following equations shall apply for SDG 3, 4, 5, 8, 9, 10, 11 and 12:

Net benefit of SDG = Project outcome of SDG – Baseline outcome of SDG

Net benefit of SDG = Project outcome of SDG – 0

Net benefit of SDG = Project outcome of SDG

More specifically, the proposed aproach for the project value and net benefit of these SDGs is the following:

SDG 3 Good Health and Well Being

The project creates new jobs and consequently health financing, and many training are offered to the health workforce, contributing thus to the Target 3.c:

Target 3.c: „Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States."

Project Indicators for SDG 3:

4. Number of new health workforce recruited each year
5. Number of training sessions on safety and health at working environment
6. Number of trainings on fire and safe protection (PSI trainings)

Project situation:

In the project situation, the number of new jobs created, the number of training sessions on safety and health at working environment and on fire and safe protection are recorded by the PP.

1. SDG3 contribution = Number of new health workforce recruited each year
2. SDG3 contribution = Number of training sessions on safety and health at working environment
3. SDG3 contribution = Number of trainings on fire and safe protection (PSI trainings)

SDG 4 Quality Education

Trough its educational programs and trainings on recycling, sustainable development, climate change and circular economy, the project actively contributes to the Target 4.7:

Target 4.7: „By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development."

Project Indicators for SDG 4:

4. Number of visits of school children to the plant to enhance environment education and climate change awareness
5. Number of children and students trained on recycling, sustainable development and circular economy.
6. Number of trainings organised with the occasion of different events and fairs to promote recycling and sustainable development

Project situation:

In the project situation, the number of visits of school children to the plant to enhance environment education and climate change awareness, the number of children and students trained on recycling, sustainable development and circular economy and the number of trainings organised with the occasion of different events and fairs to promote

recycling and sustainable development are recorded by the PP in order to indicate the contribution to SDG 4.

1. SDG4 contribution = Number of visits of school children to the plant to enhance environment education and climate change awareness
2. SDG4 contribution = Number of children and students trained on recycling, sustainable development and circular economy.
3. SDG4 contribution = Number of trainings organised with the occasion of different events and fairs to promote recycling and sustainable development

SDG 5 Gender Equality

One of the main benefits of the project is its approach toward gender equality, women being promoted in management position, including the high level management, contributing to the Target 5.5:

Target 5.5: „Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life."

Project Indicators for SDG 5:

5. Number of women employed by project activity
6. Proportion of women in total employment
7. Number of women in managerial positions
8. Proportion of women in managerial positions in total management positions

Project situation:

In the project situation, the number of women employed by the project activity and their proportion in total employment are recorded by the PP in order to indicate the contribution to SDG 5. Moreover, the number of women in managerial positions and the proportion of women in managerial positions in total management positions are monitored.

1. SDG5 contribution = Number of women employed by project activity
2. SDG5 contribution = Proportion of women in total employment
3. SDG5 contribution = Number of women in managerial positions
4. SDG5 contribution = Proportion of women in managerial positions in total management positions

SDG 8 Decent work and economic growth contribution

Through the project activities, it will create jobs which contribute to the target 8.5:

Target 8.5: „By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value."
The number of jobs created by the project with safe and healthy work environment together with number of trainings regarding the technical services required to operate

the recycling plant, the number of suggestions and recommendations made by the employees are recorded by the PP. At the same time, wage bonuses offered by the employer to the employees are quantified and contribute at the development of SDG 8.

Project indicators for SDG 8:

3. Number of staff employed in the project activity
4. Number of trainings regarding the technical services required to operate the recycling plant
5. Number of suggestions and recommendations made by the employees
6. Wage bonuses offered by the employer to the employees

Project situation:

In project situation, the number of total people employed, the training sessions regarding the operational side of the plant equipment, the number of suggestions and recommendations and wage bonuses offered by the employer to the employees are monitored by the PP

1. SDG8 contribution = Number of staff employed in the project activity
2. SDG8 contribution = Number of trainings regarding the technical services required to operate the recycling plant
3. SDG8 contribution = Number of suggestions, recommendations made by the employees
4. SDG8 contribution = Wage bonuses offered by the employer to the employees

SDG 9 Industry Innovation and Infrastructure

The project largely contributes to the employment of local people and, thus, making its contribution to Target 9.2.

Target 9.2: "Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries."

Project Indicators for SDG 9:

7. Number of local people employed in the project activity
8. Proportion of local people employed in total number of employees

Project situation:

In the project situation, the number of local people employed and their proportion in total staff employed are recorded by the PP

2. SDG9 contribution = Number of local people employed
3. SDG9 contribution = Proportion of local people employed in total number of employees

SDG 10 Reduce inequalities within and among countries

Through its plastic recycling activities, the project save foreign exchange, which contributes to the reducing inequalities among countries and ensure the achievement of Target 10.3**.**

Targets 10.3: „Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this."

Project Indicator for SDG 10:

1. Foreign exchange saved by the project (plastic saved/recycled x imported price/tonne)

Project situation:

In the project situation, the foreign exchange saved is recorded by the PP.

1. SDG10 contribution = Foreign exchange saved

SDG 11 Sustainable Cities and Communities

The project positively contributes to the reduction of the municipal plastic waste through its collection and recycling activities, having a significant impact on Target 11.6.

Targets 11.6: "By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management."

Project Indicators for SDG 11:

8.1 Quantity of the municipal plastic waste collected by the project activity
8.2. Project plastic waste collected quantities

Project situation:

In the project situation, the quantity of the municipal plastic waste collected and the project plastic waste collected quantities are recorded by the PP.

1. SDG11 contribution = Quantity of the municipal plastic waste collected by the project activity
2. SDG11 contribution = Project plastic waste collected quantity

SDG 12 Responsible consumption and production

Through the project activities, there is recycled plastic material (intermediate output product) used in the production of recycled end products and also programs. At the

same time, the project developer supports communication campaigns to encourage the responsible consumption and reuse of products, all contributing to the target 12.5.

Target 12.5: "By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse."

Project Indicators for SDG 12:

1. Quantity of plastic material recycled per year
2 Number of programs (communication campaigns) to encourage more environmentally-friendly and responsible products and services

Project situation:

In project situation, the quantity of recycled plastic is measured yearly by the PP. The number of programs (communication campaigns) to encourage more environmentally-friendly and responsible products and services is also recorded by the PP.

1. SDG12 contribution = Quantity of plastic material recycled per year

SDG12 contribution = Number of programs (communication campaigns) to encourage more environmentally-friendly and responsible products and services

E.3. Calculation of leakage

SDG 13 Climate Action - Emissions reductions

As already mentioned, since MSW collected does not contain organic biogenic waste segregated in the recycling facility, no leakage calculation is required.

E.4. Calculation of net benefits or direct calculation for each SDG Impact

SDG	SDG Impact	Baseline estimate	Project estimate	Net benefit
SDG 13 Climate action	Emissions reductions	142,684	36,059	106,625
SDG 3 Good Health & Well Being	Number of new health workforce recruited each year	0	83	83
SDG 3 Good Health & Well Being	Number of training sessions on safety and health at working environment	0	1596	1596
SDG 3 Good Health & Well Being	Number of trainings on fire and safe protection	0	72	72
SDG4 Quality Education	Number of visits of school children to the plant to enhance environment education and climate change awareness	0	39	39
SDG4 Quality Education	Number of children and students trained on recycling, sustainable development and circular economy	0	2,583	2,583
SDG4 Quality Education	Number of training sessions to promote recycling and sustainable development	0	48	48
SDG 5 Gender Equality	Number of women employed by project activity[2]	0 0 0	2021:266 2022:232 2023:194	266 232 194
SDG 5 Gender Equality	Proportion of women in total employment	0 0 0	2021: 37% 2022: 36% 2023: 34%	37% 36% 34%
SDG 5 Gender Equality	Number of women in managerial positions	0 0 0	2021: 7 2022: 8 2023: 10	7 8 10
SDG 5 Gender Equality	Proportion of women in managerial positions	0 0 0	2021: 42% 2022: 47% 2023: 59%	42% 47% 59%

[2] As it is irrelevant to calculate the total number of women, we have differenciated them by years. We did the same for all monitoring parameters of SDG 5, SDG 8_1 and SDG 9_1.

	in total management positions			
SDG 7 Affordable and Clean Energy	Energy Savings	130,373	41,366	89,007
SDG 7 Affordable and Clean Energy	Fuel Savings	489,386	33,733	455,653
SDG 8 Decent work & Economic Growth	Number of staff employed in the project activity	0 0 0	2021: 707 2022: 652 2023: 566	707 652 566
SDG 8 Decent work & Economic Growth	Number of trainings regarding the technical services required to operate the recycling plant	0	24	24
SDG 8 Decent work & Economic Growth	Number of suggestions, recommendations made by the employees	0	412	412
SDG 8 Decent work & Economic Growth	Wage bonuses offered by the employer to the employees	0	2,456,237	2,456,237
SDG 9 Industry, Innovation & Infrastructure	Number of local people employed by the project activity	0 0 0	2021: 689 2022: 631 2023: 557	689 631 557
SDG 9 Industry, Innovation & Infrastructure	Proportion of local people employed in total number of employees	0 0 0	2021: 97% 2022: 97% 2023: 98%	97% 97% 98%
SDG 10 Reduce Inequalities	Foreign exchange saved	0	19,663,271	19,663,271
SDG 11 Sustainable Cities & Communities	Quantity of the municipal plastic waste collected by the project activity	0	166,327	166,327
SDG 11 Sustainable Cities & Communities	Project plastic waste collected quantity	0	0	0
SDG 12 Responsible Consumption & Production	Quantity of plastic material recycled per year	0	117,453	117,453
SDG 12 Responsible Consumption & Production	Number of programs to encourage more environmentally-friendly and responsible products and services	0	16	16

E.5. Comparison of actual SDG Impacts with estimates in approved PDD

SDG	Values estimated in ex ante calculation of approved PDD for this monitoring period	Actual values[3] achieved during this monitoring period
13	Emissions reductions Validated PDD has the actual values of the year 2016: 45,380 tCO2	2021: 51,569 tCO_2 2022: 32,165 tCO_2 2023: 22,891 tCO_2
3	Number of new health workforce recruited each year 2016: 47	2021: 34 2022: 49 2023: 0
3	Number of training sessions on safety and health at working environment 2016: 7900	2021: 536 2022: 536 2023: 524
3	Number of trainings on fire and safe protection 2016: 24	2021: 24 2022: 24 2023: 24
4	Number of visits of school children to the plant to enhance environment education and climate change awareness 2016: 12	2021: 8 2022: 3 2023: 28
4	Number of children and students trained on recycling, sustainable development and circular economy 2016: 747	2021: 350 2022: 63 2023: 2170
4	Number of training sessions to promote recycling and sustainable development 2016: 10	2021: 7 2022: 9 2023: 32
5	Number of women employed by project activity 2016: 377	2021: 266 2022: 232 2023: 194
5	Proportion of women in total employment 2016: 38%	2021: 37% 2022: 36% 2023: 34%
5	Number of women in managerial positions 2016: 18	2021: 7 2022: 8 2023: 10
5	Proportion of women in managerial positions in total management positions	2021: 42% 2022: 47% 2023: 59%

[3] Whenever emission reductions are capped, both the original and capped values used for calculations must be transparently reported. Use brackets to denote original values.

	2016: 72%	
7	Energy Savings 2016: 35,008 MWh	2021: 43,616 MWh 2022: 26,368 MWh 2023: 19,023 MWh
7	Fuel Savings 2016: 208,849 MWh	2021:216,668 MWh 2022:142,174 MWh 2023: 96,811 MWh
8	Number of staff employed in the project activity 2016: 994	2021: 707 2022: 652 2023: 566
8	Number of trainings regarding the technical services required to operate the recycling plant 2016: 1	2021: 8 2022:10 2023: 6
8	Number of suggestions, recommendations made by the employees 2016: 3	2021: 185 2022: 171 2023: 56
8	Wage bonuses offered by the employer to the employees 2016: 124,935 euro	2021: 825,058 euro 2022: 980,935 euro 2023: 650,244 euro
9	Number of local people employed by the project activity 2016: 945	2021: 689 2022: 631 2023: 557
9	Proportion of local people employed in total number of employees 2016: 95%	2021: 97% 2022: 97% 2023: 98%
10	Foreign exchange saved 2016: 2,797,657 euro	2021: 4,902,274 euro 2022: 12,863,201 euro 2023: 1,897,796 euro
11	Quantity of the municipal plastic waste collected by the project activity 2016: 72,885 tons	2021: 74,430 tons 2022: 51,805 tons 2023: 40,092 tons
11	Project plastic waste collected quantity 2016: 19,413 tons	2021: 0 tons 2022: 0 tons 2023: 0 tons
12	Quantity of plastic material recycled per year 2016: 52,081 tons	2021: 56,002 tons 2022: 36,917 tons 2023: 24,534 tons
12	Number of programs to encourage more environmentally-friendly and responsible products and services 2016: 9	2021: 1 2022: 7 2023: 8

E.5.1. Explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period

The values for the ERs provided in the approved PDD for the ex ante calculation were based on the actual ERs from the year 2016.

E.6. Remarks on increase in achieved SDG Impacts from estimated value in approved PDD

Increase in achieved SDG 13
Taking into account the emissions reductions achieved during this monitoring period and the estimated de emissions savings in the PDD (45,380tCO2e), the actual GHG emission reductions increased with 6,189 tCO2e in 2021. The validated ER from the PDD is based on actual data from 2016 of the project. But in 2021, both the plastic waste input and output of the project is greater than in 2016, hence the ER in 2021 is bigger that the estimated value ex ante. This is a positive contribution since one of the project developer's objectives is to yearly increase the waste collected input, which was achieved in 2021.

Increase in achieved SDG 3_1
The number of new health workforce recruited in 2022 increased with 2 employees compared to the estimated value from PDD, which was based on acual data from 2016 (47 employees), which is a positive contribution to employment in the region.

Increase in achieved SDG 4
As you will see on section E4, all parameters from SDG 4 have increased in year 2023 compared with estimated values in PDD. The increase in achieved SDG 4 indicator in 2023 from estimated value in the PDD shows the involvement of the project development in the education process of children, students and people from all over Romania to promote recycling and sustainable development.

Increase in achieved SDG 7
The increase on the achieved SDG 7_1 Energy Savings and SDG 7_2 Fuel Savings in the year 2021 of the monitoring period as described on E5 compared to the estimated ex ante energy and fuel savings in the PDD (actual values from 2016) can be explained as follows: both the plastic waste input and output of the project is greater than in 2016, hence the energy and fuel savings from the current monitoring period are bigger that the estimated value ex ante. Moreover, the project electricity consumptions and Diesel and gasoline consumptions were less in the monitoring period compared to ex ante values in PDD, and this contributed also to higher energy and fuel savings.

Increase in achieved SDG 8_2
The number of trainings regarding the technical services required to operate the recycling plant increased in each year of the current monitoring period compared to the estimates from the validated PDD since Greentech posed more emphasis on these trainings in order to improve the quality of its operations.

Increase in achieved SDG 8_3

As described on section E5, the number of suggestions, recommendations made by the employees during this monitoring period are drastically higher in this monitoring period than the estimated ex ante from the PDD based on actual values from 2016 (3 suggestions) since the project developer implemented in 2019 a new procedure (wistle-blowing) of monitoring this parameter.

Increase in achieved SDG 8_4
The wage bonuses offered by the employer to the employees are also higher compared with those estimated in the validated PDD based on actual values from 2016 as seen on section E5. This is a positive outcome that can be explained by Greentech's commitment to offer good conditions and benefits to all employees.

Increase in achieved SDG 9_2
The proportion of local people employed by the project in total number of employees is higher than the estimated value of the PDD, which shows the positive outcome of the project for the local community.

Increase in achieved SDG 10_1
The foreign exchanges saved by the project in year 2021 and 2022 is higher in a significant amount than the estimated value of the PDD form 2016, prooving the benefits of the project for the country.

Increase in achieved SDG 11_1
The quantity of the municipal plastic waste collected by the project activity has increased in the years 2021 compared to the estimated value from PDD, which was based on acual data from 2016, as per the numbers written on section E5. This is one of the project developer's objectives to yearly increase the waste collected input as a means to contributing to SDG 11.

Increase in achieved SDG 12_1
The quantity of the plastic material recycled per year has increased in 2021 compared to the estimated value from PDD, which was based on acual data from 2016, as per the number in section E5. This is one of the project developr's objectives - to increase the output plastic recycled on an annually basis.

SECTION F. SAFEGUARDS REPORTING

As all questions in the assessment of the GS4GG Safeguarding Principles and Requirements were answered "No" in the Transition Annex to GS4GG, there are no safeguards reporting.

SECTION G. STAKEHOLDER INPUTS AND LEGAL DISPUTES

G.1. List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.

There were not any grivances or inputs received via the Continous Input and Grievance Mechanism within the current monitoring period

G.2. Report on any stakeholder mitigations that were agreed to be monitored.

Since there were not any grivances or inputs received via the Continous Input and Grievance Mechanism, there were not any stakeholder mitigations to be monitored.

G.3. Provide details of any legal contest that has arisen with the project during the monitoring period

No. crt.	Plaintiff	Value of the claim	Status
1	In rem investigation. GREENTECH S.A. – suspect	-	Case file no. 3382/P/2021 – under investigation = Following the complaint of a physical person, Greentech submitted all relevant permits and authorizations asked by Buzau Police Department, which is the competent authority to investigate this case file. The investigation is ongoing.
2	Johann Borgers GmbH, Borgersstraße 2-10, 46397	EUR 863,000	Bankruptcy file - 43 IN 642/22 Bocholt Local court – Insolvency Court procedure undergoing. The preliminary insolvency procedure was opened on October 17th, 2022 and Greentech S.A. was confirmed on creditors list. KCreditor number: 504389
3	PET STAR HOLDING SA	4.676.993,29 RON	Civil File no. 3202/114/2022 – undergoing = On 11.05.2020 between Greentech S.A. and PET STAR HOLDING S.A. was concluded the contract for the supply of Rpet granules.(Greentech S.A. – Seller and PET STAR HOLDING – Buyer) Amid repeated payment delays, Greentech issued a payment order, communicated through execution officers. Following this notification, between 09.2021 and 02.2022, PET STAR paid in full the amount invoked in the order – 4,003,935 lei. Obviously, the amount paid late was generating penalties, based on art. 10 of the

			Contract (GTC), penalties amounting to 0.06% day delay, being accumulated the amount of 4,676,933 lei. The object of the civil case is the recovery of this commercial claim. The next hearing in this case is 17.01.2024.

Revision History

Version	Date	Remarks
1.1	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Section for POA monitoring Forward action request section Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on safeguard reporting Clarity on design changes Leakage section added for VER/CER projects Addition of Comparison of monitored parameters with last monitoring period Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.0	10 July 2017	Initial adoption